



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,748	10/30/2003	Bruce B. Doris	FIS920030264 (00750483AA)	6189
30743 7590 01/14/2011 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190				
EXAMINER				
CAO, PHAT X				
ART UNIT		PAPER NUMBER		
2814				
MAIL DATE		DELIVERY MODE		
01/14/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* BRUCE B. DORIS, HAINING YANG, and HUILONG ZHU

---

Appeal 2009-010874  
Application 10/695,748  
Technology Center 2800

---

Before MARC S. HOFF, ELENI MANTIS MERCADER, and  
CARL W. WHITEHEAD, JR., *Administrative Patent Judges*.

WHITEHEAD, JR., *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

---

<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

## STATEMENT OF THE CASE

### *Introduction*

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 10-12 and 16-19. *See* Appeal Brief 10. We have jurisdiction under 35 U.S.C. § 6(b) (2002). We affirm.

### *Exemplary Claim*

10. A structure that adjusts carrier mobility in CMOS transistors comprising:

a substrate,

a first transistor having a gate dielectric, gate electrode, and source, drain, and gate regions, formed on said substrate,

a second transistor having a gate dielectric, gate electrode, and source, drain, and gate regions, formed on said substrate,

a first film providing tensile stress at least at the channel of said first transistor,

a second film providing compressive stress at least at the channel of said second transistor, a portion of said second film extending in the same region of said substrate as a portion of said first film, and

a shear force isolation layer separating said first film and said second film and said tensile and compressive stress therein in at least one area.

### *Rejection on Appeal*

Claims 10-12 and 16-19 stand rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Publication 2003/0181005 A1 Hachimine et al. (“Hachimine”).

*Appellants' Contentions*

At pages 13-17 of the Appeal Brief, Appellants contend that the Examiner erred in rejecting claims 10-12 and 16-19 under 35 U.S.C. § 102(e) as being unpatentable over Hachimine.

A. Appellants contend that

paragraph [0214] of Hachimine et al. clearly states that the effect of one stressed film overlapping an oppositely stressed film will reduce the effect of the latter *unless the overlapping film is removed*; thus *clearly indicating that layer 15 is not expected to function as a shear force isolation film* or even recognizing that such a film or even such a structure could be produced. In regard to the embodiment of Figure 31 (embodiment 6) films 14b and 15 are left in place but the different tensile and compressive stresses are achieved by the stress from film 14b exceeding the stress derived from film 14a which can only be achieved if film 15 is *not* a shear force isolation film since the stress from film 14b *must necessarily be transmitted through both films 15 and 14a to the substrate, as explicitly noted in paragraph [0279]*.

(Appeal Brief 13).

B. Appellants contend that

The Examiner does not identify any new grounds of rejection in the Examiner's Answer. However, it is respectfully submitted that the errors in the ground of rejection asserted in the final action in this application are particularly evident from the Examiner's assertions and response to Appellants['] arguments as stated in the Examiner's Answer.

(Reply Brief 1).

PRINCIPLES OF LAW

“[T]he PTO gives claims their ‘broadest reasonable interpretation.’”  
*In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211

F.3d 1367, 1372 (Fed. Cir. 2000)). “Moreover, limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989)).

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

### *Issue on Appeal*

Did the Examiner err in rejecting claims 10-12 and 16-19 as being unpatentable because the reference fails to disclose the claim limitation at issue?

### ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments (Appeal Brief and Reply Brief) that the Examiner has erred.

We disagree with Appellants’ conclusion. We adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which the appeal is taken and (2) the reasons set forth by the Examiner in the Examiner’s Answer in response to Appellants’ Appeal Brief. We concur with the conclusion reached by the Examiner.

Appellants argue that Hachimine does not indicate that layer 15 is a shear force isolation layer and that the Examiner has improperly relied upon inherency (Appeal Brief 13-14). Appellants are correct in that Hachimine does not refer to layer 15 as a shear force isolation layer. The Examiner

acknowledges that fact; however, as the Examiner correctly points out, Appellants' Specification is silent in regards to layer 120 (*see* Figure 6; Specification 12) being a shear force isolation layer. *See* Answer 5. The Examiner argues that, since the materials are the same for the claimed layer as Hachimine's layer, without any specifics or details provided by Appellants' Specification, Hachimine's layer is a shear isolation force layer, just as Appellants' layer is (Answer 5).

In the Reply Brief, Appellants argue that the Examiner has made a new grounds of rejection based upon the Examiner's reference to paragraph [0170] of Hachimine (Reply Brief 1-2).

Further, Appellants rely on the first full paragraph on page 11 of the Specification and the first full paragraph on page 12 of the Specification (Reply Brief 3) to support their position that layer 120 (or 12) is a shear force isolation layer; however, there is no support for either of Appellants' positions. Appellants' Specification is not specific about the shear isolation layer, and there is nothing within Appellants' Specification that would lead one of ordinary skill in the art to give any credence to Appellants' arguments that their shear isolation layer is different from Hachimine's layer, since they are formed from the same material.

## CONCLUSION

The Examiner has not erred in rejecting claims 10-12 and 16-19 as being unpatentable.

## DECISION

The Examiner's rejection of claims 10-12 and 16-19 is affirmed.

Appeal 2009-010874  
Application 10/695,748

No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

babc

WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C.  
11491 SUNSET HILLS ROAD  
SUITE 340  
RESTON, VA 20190